DUNA VISTA RESORTS, *ET AL.*

187 IBLA 43 Decided January 13, 2016

United States Department of the Interior
Office of Hearings and Appeals
Interior Board of Land Appeals
801 N. Quincy St., Suite 300
Arlington, VA 22203

703-235-3750 703-235-8349 (fax)

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IBLA 2014-34 Decided January 13, 2016

Appeal from a decision of the Associate State Director, Eastern States Office, Bureau of Land Management, deciding to offer Federal oil and gas resources for competitive lease sale. MIES-057851.

Affirmed.

1. Environmental Quality: Environmental Statements–Mineral Leasing Act: Environment--National Environmental Policy Act of 1969: Environmental Statements–National Environmental Policy Act of 1969: Finding of No Significant Impact–Oil and Gas Leases: Competitive Leases–Oil and Gas Leases: Discretion to Lease

BLM properly decides to offer nominated Federal oil and gas resources for competitive lease sale, absent preparation of an EIS, where, in accordance with section 102(2)(C) of the National Environmental Policy Act of 1969, 42 U.S.C. § 4332(2)(C) (2012), and applying a rule of reason, it has taken a "hard look" at the environmental consequences of leasing and reasonable alternatives thereto, considering all relevant matters of environmental concern, and made a convincing case that no significant impact will result therefrom or that any such impact will be reduced to insignificance by the adoption of appropriate mitigation measures. BLM's decision not to prepare an EIS will be affirmed where the appellant does not demonstrate, with objective proof, that BLM failed to consider a substantial environmental question of material significance to the proposed action, or otherwise failed to abide by the statute.

APPEARANCES: Christopher M. Bzdok, Esq., and Ross A. Hammersley, Esq., Traverse City, Michigan, for appellants; Stephen G. Mahoney, Esq., Office of the Solicitor, U.S. Department of the Interior, Pittsburgh, Pennsylvania, for the Bureau of Land Management.

OPINION BY ADMINISTRATIVE JUDGE KALAVRITINOS

Duna Vista Resorts, a non-profit incorporated homeowners association, and Paul and Caroline Mohai (collectively Duna Vista or appellants) have appealed from a September 13, 2013, Decision Record (DR) of the Associate State Director, Eastern States Office, Bureau of Land Management (BLM), deciding to offer 80.28 acres of Federal oil and gas resources in Pentwater Township, Oceana County, Michigan, for competitive lease sale.[1] The DR and Finding of No Significant Impact (FONSI) were based on an August 30, 2013, Environmental Assessment (EA) DOI-BLM-ES-0030-2013-0017-EA), which the Northeastern States Field Office (NSFO), BLM, prepared pursuant to the National Environmental Policy Act of 1969 (NEPA), 42 U.S.C. § 4332, *et seq*. (2012), and the Council on Environmental Quality implementing regulations, 40 C.F.R. §§ 1500.1-1518.4, and Department of the Interior NEPA regulations at 43 C.F.R. Part 46.

We are not persuaded that BLM violated NEPA or implementing regulations in deciding to approve offering the Federal oil and gas resources for competitive lease sale, and, therefore, we will affirm the Associate State Director's September 2013 DR and FONSI.

Background

In 2004, the Harris Energy Company nominated the 80.28 acres of Federal oil and gas resources underlying two parcels of split estate (private surface/Federal mineral estate) land (hereinafter, Parcels) for competitive lease sale, pursuant to the Mineral Leasing Act, 30 U.S.C. §§ 181-287 (2012). The Parcels are situated in the NE¼NE¼ and NE¼SE¼ sec. 2, T. 16 N., R. 18 W., Michigan Meridian, Pentwater Township, Oceana County, Michigan, along the eastern shores of Lake Michigan.

BLM reports the total extent of oil and gas leasing in the general vicinity of the Parcels in recent years, noting the relative absence of drilling and development, given the substantial depletion of the known oil and gas reservoirs:

[1] The Mohais, members of Duna Vista Resorts, own the surface estate "overlying the subsurface mineral interests involved in th[e] BLM decision[.]" Notice of Appeal at 2.

> Since 1958, a total of 156,369 acres have been under lease in Oceana County, Michigan[.] . . . Some of the same lands have been leased repeatedly by different companies over that timeframe with no drilling or surface disturbing activities. . . . A total of three (3) vertical wells have been drilled into [F]ederal minerals in Oceana County[.] . . . One well was a dry hole and the remaining two wells were plugged within ten (10) years of the initial drilling. . . .
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> . . . Since 2003, . . . []12,300[] acres are under current [F]ederal mineral lease in Oceana County . . . with no surface or ground disturbing activities to date. Since 2000, an additional 45,354 acres were under lease and the leases expired due to no activity on the leased lands. . . . Therefore, *of the more than 156,000 acres leased since 1958, approximately one-third of the lands were under lease from 2000 to present and have resulted in exactly no wells and no surface disturbing activities*.

Answer at 9-10 (emphasis added); *see* EA at 24-25 ("Oceana County does not rank as one of the top 10 oil and gas producing counties in Michigan"), 39-40 ("The oil pools, designated the Pentwater 6-16N-17W, are largely depleted now, with most wells plugged and abandoned after about five years of production; a few wells still produce small amounts of oil. As of 1989, the pools had collectively produced about 6.9 million barrels of oil and over a billion cubic feet of gas from 143 wells.").

Of the 39 wells drilled between 1948 and 1952, within one mile of the Parcels, "33 produced commercial hydrocarbons," and 3 " produce small amounts of oil today. *Very little development activity has taken place in the area since the 1970s*." EA at 40 (emphasis added). Referring to the northern Parcel (NE¼NE¼), BLM stated that oil was produced from the Dundee formation, and the Traverse formation, which tested for water, was likely to be drilled, unlike the southern Parcel (NE¼SE¼), which appeared not to be productive or likely to be drilled. *See id.* at 41-42.

In response to nomination of the Parcels, the NSFO assembled a team of interdisciplinary resource specialists who, in a draft and final EA, analyzed the potential environmental impacts of a proposal to authorize offering the Parcels for competitive lease sale, and a no action alternative. The environmental analysis of the proposed action considered the potential post-lease sale activities of drilling and development, which would be undertaken in "compliance with [F]ederal and [S]tate laws, regulations, and policies, as well as coordination with surface owners." EA at 38; *see id.* at 6-7.

The NSFO included a reasonably foreseeable development scenario (RFDS), which predicted, for environmental assessment purposes, the level of oil and gas drilling and development likely to occur in a 2,323-acre analysis area that encompassed the Parcels. Appendix B, at pages 38-43 of the EA. The RFDS forecast the drilling and development of one well, targeting the Traverse Limestone and Dundee Limestone formations, which likely would disturb a total of approximately 2 acres over the initial 5 to 10-year life of production. EA at 38; *see id.* at 39.

The NSFO issued a draft EA on July 25, 2013, and provided a 30-day public comment period. BLM's responses to the public comments are set forth in the final EA, which it issued on August 30, 2013.

The Associate State Director executed a September 2013 FONSI, based on BLM's analysis of potential environmental impacts in the EA and the context and intensity (or severity) of impacts criteria of 40 C.F.R. § 1508.27. In the FONSI, he concluded that approving the proposed action was not likely to significantly impact the human environment and, therefore, BLM was not required to prepare an Environmental Impact Statement (EIS).

In his September 2013 DR, the Associate State Director approved the proposed action, finding it would "make Federal minerals available for economically feasible development in an environmentally sound manner." DR at 1. He determined that approval of the proposed action conformed with Federal law and policy, and with the applicable land-use plan (June 1985 Michigan Resource Management Plan (RMP)), as required by section 302(a) of the Federal Land Policy and Management Act of 1976, 43 U.S.C. § 1732(a) (2012). The Associate State Director noted that the decision did not authorize any ground-disturbing activities, and that, before doing so, BLM would need to prepare a site-specific EA, and approve an Application for a Permit to Drill (APD) and Surface Plan of Operations (SPO).

Duna Vista appealed timely from the DR, contending that, in approving the proposed action, BLM violated section 102(2)(C) of NEPA, by failing to adequately consider the likely environmental impacts of that action, which Duna Vista considers likely to be significant, and by failing to prepare an EIS. Duna Vista concludes that BLM "has not undertaken sufficient analysis to know *whether it is safe to allow development [of the oil and gas resources] to proceed*" upon issuance of a lease, following the approved competitive lease sale. Statement of Reasons for Appeal (SOR) at 4, emphasis added. It asks the Board to set aside the DR, and remand the case to BLM with directions to prepare an EIS, before deciding again whether to offer the Parcels for competitive lease sale. *See id.* at 12.

On December 12, 2013, BLM conducted the competitive lease sale. BLM reports that it awarded competitive oil and gas lease, MIES-057851, to James T. Noffke, the high bidder for the Parcels. Answer at 1-2.

Discussion

[1] Section 102(2)(C) of NEPA requires consideration of the potential environmental impacts of a proposed action in an EIS if that action is a "major Federal action[] significantly affecting the quality of the human environment." 42 U.S.C. § 4332(2)(C) (2012). A BLM decision to proceed with a proposed action will be upheld where the record demonstrates that BLM has considered all relevant matters of environmental concern, taken a "hard look" at potential environmental impacts, and made a convincing case that no significant impact will result or that any such impact will be reduced to insignificance by the adoption of appropriate mitigation measures. *Southern Utah Wilderness Alliance*, 185 IBLA 150, 156 (2014) (citing *Center for Native Ecosystems*, 182 IBLA 37, 50 (2012); *Wyoming Outdoor Council*, 173 IBLA 226, 235 (2007)). In assessing the adequacy of an EA, we are guided by a "rule of reason." *Southern Utah Wilderness Alliance*, 185 IBLA at 156; *Peter J. Mehringer*, 177 IBLA 152, 166 (2009); *Shasta Coalition for the Preservation of Land*, 172 IBLA 333, 343 (2007). The EA need only briefly discuss the likely impacts of a proposed action, thereby "provid[ing] sufficient evidence and analysis for determining whether to prepare an [EIS]": "'By nature, it is intended to be an overview of environmental concerns, *not* an exhaustive study of all environmental issues which the project raises.'" 40 C.F.R. § 1508.9; 43 C.F.R. § 46.310(a)(4); *Bales Ranch, Inc.*, 151 IBLA 353, 358 (2000) (quoting *Don't Ruin Our Park v. Stone*, 802 F. Supp. 1239, 1247 (M.D. Pa. 1992)).

An appellant seeking to overcome a decision based on an EA carries the burden of demonstrating, with objective proof, that BLM failed to consider a substantial environmental question of material significance to the proposed action. *Birch Creek Ranch*, 184 IBLA 307, 317 (2014); *Bales Ranch, Inc.*, 151 IBLA at 357. The appellant cannot simply "'pick apart a record with alleged errors and disagreements[.]'" *Arizona Zoological Society*, 167 IBLA 347, 357-58 (2006) (quoting *In re Stratton Hog Timber Sale*, 160 IBLA 329, 332 (2004)).

Furthermore, in assessing environmental impacts, BLM properly relies on the professional opinion of its technical experts, concerning matters within the realm of their expertise, when such opinion is reasonable and supported by record evidence. Courts have held that BLM's decision to issue an EA and FONSI, and not prepare an EIS, based on its environmental review, "implicates agency expertise." *Greater Yellowstone Coalition v. Flowers*, 359 F.3d 1257, 1274 (10th Cir. 2004). An appellant challenging BLM's reliance on the professional opinion of its technical experts must demonstrate, by a preponderance of the evidence, error in the data, methodology,

analysis, or conclusion of the expert. *Wyoming Outdoor Council*, 173 IBLA at 235 (citing *Fred E. Payne*, 159 IBLA 69, 77-78 (2003)). A mere difference of opinion, even of expert opinion, will not suffice to show that BLM failed to fully comprehend the true nature, magnitude, or scope of the likely impacts. *Id.*

Duna Vista contends that BLM violated section 102(2)(C) of NEPA by failing to adequately consider the likely environmental impacts of offering the Parcels for competitive lease sale. *See* SOR at 2. It argues that (1) BLM failed to consider the risk that hydrogen sulfide (H_2S) underlying the Parcels will be released into the environment, thereby harming human health, as a consequence of drilling and developing the oil and gas resources; (2) BLM failed to consider the risk to residential drinking water wells situated in close proximity to the Parcels; (3) BLM failed to consider the risk to hydrologic resources in the area surrounding the Parcels from the anticipated cumulative effects of water use by oil and gas drilling and development of the Parcels; (4) BLM failed to disclose the chemicals that will be used in connection with drilling and development of the Parcels; and (5) BLM failed to adequately consider the risk associated with the disposal of wastewater generated by drilling and development of the Parcels. Duna Vista asserts that the communities surrounding the Parcels have a "history" of "hospitalizations due to oil and gas-related H_2S exposure," there are a "high" number of residential drinking water wells situated on and in the immediate vicinity of the Parcels, and the drilling and development of oil and gas wells on the Parcels is likely to use "high volumes" of water. *Id.* at 3, 9.

Duna Vista principally argues that BLM failed to adequately consider the likely environmental impacts of leasing, and also of authorizing drilling and development of the leased lands, since BLM deferred such analysis until after the lessee or operator had submitted an APD and SPO, and BLM has prepared a site-specific EA. It asserts that since, even after a site-specific environmental analysis of a proposed APD and SPO, BLM could not entirely preclude drilling and development of the Parcels, such later analysis would not serve NEPA's purpose. *See* SOR at 2, 4 ("[T]he agency has not undertaken sufficient analysis to know whether it is safe to allow development to proceed under the proposed lease sale"), 5 ("[W]aiting to conduct a detailed analysis of exploration and development activities only *after* receipt of an APD needlessly and unlawfully restricts the agency range of options"), 8, 9 ("[T]he EA simply attempts to justify an after-lease analysis").

Duna Vista is correct that, once BLM leased the affected lands, not subject to a no surface occupancy stipulation, following the competitive lease sale, BLM has irreversibly and irretrievably committed itself to allowing drilling and development, somewhere, at some time, and in some manner, on the leased lands. *See, e.g.*, *Conner v. Burford*, 848 F.2d 1441, 1448-51 (9th Cir. 1988); *Sierra Club v. Peterson*, 717 F.2d

1409, 1414-15 (D.C. Cir. 1983); *Center for Native Ecosystems*, 170 IBLA 331, 345 (2006); *Southern Utah Wilderness Alliance*, 166 IBLA 270, 276-77 (2005).

However, we are not persuaded that BLM improperly deferred consideration of the likely environmental impacts of drilling and developing the Parcels for the recovery of oil and gas resources until after submission of an APD and SPO, and preparation of a site-specific EA. Rather, in the EA, BLM acknowledged uncertainty regarding the precise nature and extent of drilling and development, stating it could not analyze the *site-specific* impacts of drilling and development, since it did not know where on the Parcels drilling and development would take place, or how the lessee or operator would undertake such activity. *See* EA at 20 ("It is unknown when, where, how, or if future surface disturbing activities associated with oil and gas exploration and development such as well sites, roads, facilities, and associated infrastructure would be proposed. . . . [T]he types, magnitude and duration of potential impacts cannot be precisely quantified at this time, and would vary according to many factors"). Nonetheless, it is clear from the EA that BLM generally considered the likely impacts of drilling and developing the Parcels for the recovery of oil and gas resources. *See id.* at 11 ("This EA will analyze impacts to natural resources based on the [RFDS] in Appendix B"), 20 (Oil and gas exploration and development activities . . . are indirect impacts of leasing"), 20-27 (*e.g.*, de minimis emissions affecting air quality, potential clearing of up to 3.7 acres of farm and forest land, effects of noise generated by well construction extend out from 150 to 1,500 feet, drilling and development of one well likely to have minimal effect upon local residents, and effects to local water quality and quantity minimized by BLM and State requirements).

Further, despite indicating that BLM completely deferred its environmental analysis of the drilling and development of the Parcels, Duna Vista takes exception to the fact that BLM predicted that only "one conventional well on one well pad" would be developed on the Parcels. SOR at 5; *see* EA at 11 ("[Given State well spacing of 80 acres,] [s]ince the entire proposed lease is only 80.28 acres, only one well could be drilled under this lease)), 25 ("The proposed action and the associated RFDS indicate that a total of one well could potentially be drilled on these parcels"), 38, 41-42 (northern Parcel located near three wells still in production, and, although two wells could be drilled, one well is likely given past production and depletion; southern Parcel unlikely to produce, based on past drilling). It indicates that, rather than one vertical well, a number of wells might be drilled "horizontal[ly]" from the one well pad, owing to rapid technological advances in the oil and gas industry, which have occurred since the RMP was promulgated in 1985. SOR at 5.

The fact that BLM considered the likely impacts of an RFDS puts to rest appellants' claim that BLM did not, in addressing the likely impacts of leasing, consider the likely impacts of drilling and development. *See* EA at 38 ("The RFDS provides a

baseline for conducting the required [NEPA] . . . analysis before leasing can take place. This analysis will address potential interference with other surface uses and potential conflicts with surface resources."). Further, we are not persuaded that BLM was required to consider the likely impacts of any other RFDS, or, in any event, that the likely impacts of drilling and developing a number of wells at the one well pad are likely to be substantially different from drilling and developing one well at that pad. In addition, BLM specifically concluded that, while the Pentwater pools might be amenable to horizontal drilling, it was unlikely to occur. *See* EA at 11, 40-41, 41 ("Operators often will drill a vertical hole and, if it is unsuccessful, may drill one or more horizontal holes from the same well pad[.] . . . No horizontal drilling and completion has taken place in the Pentwater pools yet."), 42 ("Vertical drilling techniques have been used in the development of the Pentwater structure"). However, BLM notes that it would consider horizontal drilling at the APD stage "if any [such] drilling is proposed." Answer at 11. Duna Vista offers no convincing argument or supporting evidence establishing any error in BLM's conclusions.

We conclude that BLM appropriately considered the likely impacts of oil and gas drilling and development to the extent such impacts could be reasonably foreseen at the leasing stage, deferring only consideration of the site-specific impacts until the lessee or operator submitted an APD and SPO that detailed the specific activities proposed for the Parcels. *See* Answer at 10 ("[BLM] could defer some of the NEPA review to the APD stage"); *Town of Crestone*, 178 IBLA 79, 85-86 (2009) (citing, *e.g.*, *Northern Alaska Environmental Center v. Kempthorne*, 457 F.3d 969, 976-77 (9th Cir. 2006)).

Turning to appellants' specific charges regarding NEPA adequacy, we are not persuaded that BLM failed to adequately consider the likely impacts of drilling and developing the Parcels, for the recovery of oil and gas resources, specifically attributable to the release of H_2S into the environment, contamination of residential drinking water wells, depletion of hydrologic resources, discharge of chemicals into the environment, or disposal of wastewater.

First, BLM determined that oil and gas drilling and development might release only negligible amounts of H_2S into the environment. *See* EA at 23, 41, 42 ("H_2S is present in some of the oil wells, as well as some of the associated gas"). It noted that H_2S was found "in low concentrations in some of the wells in the Pentwater pools," and that, while H_2S had been released in 1999 by the three remaining wells still producing in that area, the release was stopped when the operator switched from venting to flaring the gas recovered by the wells and undertook other remedial actions. *Id.* at 41.

Duna Vista asserts that (1) H_2S is toxic to humans, and can, given sufficient emissions and levels of exposure, cause injury or death; (2) H_2S is found, in

exceedingly high quantities, in oil and gas producing formations in western Michigan; and (3) H_2S can be released into the environment in conjunction with oil and gas drilling and development. *See* SOR at 6-8. BLM, however, noted that H_2S is found in the Niagaran formation underlying the Parcels, which is unlikely to be targeted for drilling and development, given the fact that drilling had disclosed low production volumes, together with high concentrations of H_2S in the formation. *See* EA at 38. Rather, BLM expected drilling and development to focus on the Dundee formation, which had been shown, by previous drilling in the area, to be productive of oil and gas.[2] *See id.* at 38, 39 ("Oil with associated natural gas production . . . has come from the Traverse Lime and the Dundee carbonate reservoirs"), 41, 42 ("Any wells drilled are likely to produce only from the Dundee reservoir").

It is true that BLM does not yet know what formations are likely to be targeted by actual drilling and development. However, were the lessee or operator to propose targeting the Niagaran or other formation containing H_2S, BLM would consider the likely impacts of that activity, and the likelihood of the release of H_2S and any resulting human health effects. *See* Answer at 13 ("BLM would do further NEPA analysis regarding the target formations for the possible presence of hydrogen sulfide"). Further, were BLM to determine that such effects were unacceptable, even given the imposition of appropriate mitigation measures, it could, at that time, preclude the recovery of any oil and gas from *that formation*. At the present time, we will not assume that BLM will not assess the risks associated with drilling and developing the Niagaran or other formation from the release of H_2S, and, further, decide to go forward with such activity. Nor are persuaded that BLM erred in concluding that H_2S concentrations, in the case of the Parcels, are limited to the Niagaran formation. *See* SOR at 8-9.

Further, BLM correctly acknowledges that oil and gas drilling and development will be monitored for compliance with Federal and State laws, concerning H_2S and other emissions, and subject to enforcement in the event of noncompliance. *See* EA

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[2] BLM notes, on appeal, the history of drilling and development in and near the Parcels:

> One Federal well was drilled in the [n]ortheastern corner of NE¼NE¼ in 1948 into the Dundee Carbonate Formation, which after acid treatment produced 240 barrels/day; it was plugged and abandoned in 1952 [after having tested for water in the Traverse Limestone formation]. . . . Another well was drilled, the Noffke 1-1, a vertical well that produced 15 barrels/day from the Traverse, Stony Point, Dundee and Reed City Carbonate Formations. [Horizontal drilling was planned and permitted, but never undertaken.]

Answer at 5; *see* EA at 40.

at 31 ("[B]oth BLM and the [S]tate will monitor any well that may result [from leasing]. Both entities enforce regulations for the proper management of H_2S in drilling and production operations. If the regulations conflict, the more stringent regulation will apply."), 42; Answer at 13 ("[E]ven if there are potentially high levels of hydrogen sulfide in any of the [other] formations, the [S]tate regulations provide for . . . monitoring and management of hydrogen sulfide to protect the safety of the public"), 14 (State regulations require H_2S detection and warning system, and location of new H_2S wells (with H_2S not less than 300 parts per million) a specified distance from, *inter alia*, water wells, structures used for public or private occupancy, and areas maintained for public recreation). We have long held that, in undertaking NEPA review, BLM need not presume that the proposed activity is likely to violate Federal and State laws, and address the environmental ramifications of such noncompliance. *See*, *e.g.*, *Powder River Basin Resource Council*, 180 IBLA 32, 57 (2010) ("BLM need not evaluate the potential environmental consequences resulting from noncompliance with Federal and State permitting requirements or assume that violations of Federal and State standards will inevitably occur"); *Wyoming Outdoor Council*, 176 IBLA 15, 27, 30 ("In assessing the potential significant environmental impacts in the EIS, BLM properly relied upon the adequacy of State enforcement to ensure that no [statutory] . . . violation occurs") (2008).

Second, BLM determined that oil and gas drilling and development was not likely to contaminate any residential drinking water wells, which are generally drilled to a depth of 50 feet, and not below 350 feet, well above the oil and gas reservoirs, situated at a depth of from 1,600 to 2,200 feet. *See* EA at 8, 19, 23, 26-27, 39. It specifically noted that the oil and gas well was unlikely to be horizontally drilled, and, since any oil and gas would be recovered from "carbonate reservoirs," would "not involve hydraulic fracture operations." *Id.* at 8; *see id.* at 41 ("Hydraulic fracturing is not used in the formations likely to produce in this area"). Rather, wells drilled "in carbonate formations are completed using *acidization*, a process in which a few thousand gallons of solution of hydrochloric acid is injected into the formation, where it opens up the fractures in the formation," resulting in oil and gas production. *Id.* at 11. BLM stated that the well would, in accordance with BLM and State requirements, be cased and cemented, in order to prevent oil and gas from entering any aquifer through which the well passes, and therefore oil and gas drilling and development was "unlikely" to contaminate any aquifer. *Id.* at 8; *see id.* at 26-27. It further noted that water needed for drilling and development would come from a well drilled at the well site or be trucked into the well site, but that, in any case, after use, it would, together with any wastewater associated with production, be disposed of in injection wells approved by the State. *See id.* at 8, 42. BLM stated that injection wells would generally target formations from which oil and gas had already been removed, and, in any case, be "isolated from fresh water aquifers," in accordance with State law. *Id.* at 8; *see id.* at 23.

Duna Vista, however, asserts that BLM failed to take into account the likelihood that oil and gas wells will be drilled horizontally and developed by hydraulic fractures, thus raising the risk of water well contamination. *See* SOR at 9-10. However, it offers no convincing argument or supporting evidence that drilling and development is likely to occur by such means. Further, even if the lessee or operator proposes such activity, BLM can analyze the likely effects of such activity, and incorporate appropriate measures to ensure that no significant impacts occur, or even preclude such activity altogether if it determines, in the site-specific EA, that impacts are likely to be unacceptable. *See* Answer at 15 ("In the unlikely event that the lessee does propose to use [horizontal drilling and/or hydraulic fracturing][,] . . . the NEPA analysis will occur at the APD stage"). At that time, BLM can certainly take into account the ongoing efforts by BLM and the State to address the risks of groundwater contamination associated with oil and gas drilling and development, and especially hydraulic fracture recovery methods. *See* SOR at 10-11. We will not now second-guess BLM, and assume it will not comply with its procedural obligations under NEPA, or its substantive obligations under Federal and State laws and regulations.

Third, BLM determined that oil and gas drilling and development was not likely to deplete any hydrologic resources. *See* EA at 8, 26. It generally expected that drilling and completing the oil and gas well, to a depth of approximately 2,100 feet, would require a total of from 15,000 to 20,000 gallons of water. *See id.* at 8. It noted that this would increase to a total of from 50,000 to 55,000 gallons, in the case of horizontal drilling, to a length of 5,000 feet. *See id.*

Appellants challenge the accuracy of BLM's assessment of the quantity of water likely to be available for use in conjunction with the recovery of oil and gas, asserting that it is dependent on BLM's use of computer modeling software known as the Water Withdrawal Assessment Tool (WWAT), developed by the Michigan Department of Environmental Quality. *See* SOR at 11-12. It states that this software was shown to be inaccurate in the case of wells used to provide water for the drilling and development of the Westerman 1-32 HD1 oil and gas well, noting that, because the quantity of water was "significantly underestimated," "[t]he operator was forced to purchase [additional] water . . . in order to complete the well." *Id.* at 11, 12. Duna Vista also asserts that the WWAT does not consider at all the cumulative effects of water withdrawals associated with the drilling and development of multiple oil and gas wells.

BLM did not determine the quantity of groundwater available for removal, simply noting that water used in connection with oil and gas drilling and development would be obtained either from a well drilled at the well site or a truck brought into the well site, depending on the expense entailed. *See* EA at 8, 42. While it generally noted the total quantity of water that might be extracted for use, BLM did not assess

the extent to which this was likely to affect the existing supply of underground water, and therefore the aquifer. *See id.* Rather, BLM noted that the extraction and consumption of water by Federally-approved oil and gas drilling and development are "regulated by the State of Michigan." *Id.* at 26. It added: "Anyone wishing to withdraw water at a rate of more than 70 gallons per minute must use the online Water Withdrawal Assessment Tool (Institute of Water Research, 2012) and obtain a registration for the withdrawal." *Id.*

We are not persuaded that WWAT has been shown to be incapable of gauging the quantity of water likely to be available for use in connection with oil and gas drilling and development, *in the case of the Parcels*. In any event, complaints regarding the applicability or reliability of WWAT should be directed to the State, which employs the WWAT in connection with its efforts to regulate the use of underground water. BLM justifiably relies on State regulation, and therefore, in undertaking NEPA review, need not presume that the proposed activity is likely to violate State water laws, and address the environmental ramifications of such noncompliance. *See, e.g.*, *Powder River Basin Resource Council*, 180 IBLA at 57; *Wyoming Outdoor Council*, 176 IBLA at 27, 30.

Fourth, BLM acknowledged that oil and gas drilling and development might accidentally discharge chemicals, in the form of drilling and completion fluids, into the environment, but indicated that any impacts would be mitigated in ways that would be spelled out at the APD stage, as required by BLM and the State. *See* EA at 23, 26-27. Appellants offer no convincing argument or supporting evidence disputing BLM's determination.

Fifth, and finally, BLM determined that oil and gas drilling and development was not likely to adversely affect the environment by disposing of wastewater, since it would generally be placed in injection wells, which would, as required by BLM and the State, be cased and cemented, and completed in underground formations isolated from any aquifers. *See* EA at 8, 23, 26, 41. Duna Vista offers no convincing argument or supporting evidence disputing BLM's determination.

Next, Duna Vista contends that BLM violated section 102(2)(C) of NEPA by failing to prepare an EIS to address the "many significant environmental and human health impacts." SOR at 2. It asserts that each of the impacts that was allegedly inadequately addressed in the EA, whether associated with the release of H_2S into the environment, contamination of residential drinking water wells, depletion of hydrologic resources, discharge of chemicals into the environment, or disposal of wastewater, is likely to rise to the level of significance, requiring preparation of an EIS. We conclude that BLM adequately addressed these impacts, and, where necessary, took appropriate action to generally ensure that none of the impacts rises to the level of

significance. Appellants offer no convincing argument or supporting evidence demonstrating that, at the leasing stage, BLM was not sufficiently aware of the nature and extent of each of these impacts, or failed to adequately ensure that they will generally not rise to the level of significance.

Duna Vista generally asserts that BLM is required to prepare an EIS, since 3 of the 10 intensity (or severity) of impacts criteria of 40 C.F.R. § 1508.27, were satisfied, specifically (1) the proposed action is likely to affect public health; (2) the effects of the proposed action on the human environment are likely to be highly controversial; and (3) the possible effects of the proposed action on the human environment are highly uncertain or involve unique or unknown risks. *See* SOR at 6.

40 C.F.R. § 1508.27 only requires "consideration[]" of the intensity (or severity) of impacts criteria, along with the context of a proposed action, in determining whether the proposed action is likely to significantly impact the human environment. It does not require that an EIS must be prepared when any one or more of the criteria are satisfied. As we said in *Wyoming Outdoor Council*, 173 IBLA at 246-47:

> Referring to 40 C.F.R. § 1508.27, we agreed [in *Missouri Coalition for the Environment*, 172 IBLA 226 (2007),] with BLM that
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> > the regulatory provisions identify only . . . many matters that an agency "should" consider in determining the intensity or severity of the impact of the proposed action and this analysis is only one element of the determination of whether an action "significantly" affects the environment, "which is itself a component of the analysis of whether to prepare an EIS." . . . Indeed, the regulations . . . do not *require* an agency to prepare an EIS simply because the impacts of the proposed action are "highly controversial" or "largely unknown," [or meet any of the other intensity criteria] . . . .
>
> 172 IBLA at 249 (*quoting* 40 C.F.R. § 1508.27[].]

In the present case, we are not persuaded that *any* of the specified criteria are satisfied. BLM generally stated, in its FONSI, that, based on consideration of the EA and the regulatory significance criteria, the proposed action was not likely to significantly impact the human environment, and, therefore, an EIS was not required. It concluded that leasing, along with drilling and developing, the Parcels is not likely to adversely affect public health, since Federal and State regulation would "proper[ly] manage[]" H_2S emissions. EA at 41. Again, Duna Vista offers no convincing

argument or supporting evidence to the contrary. Nor are we persuaded that the effects of such activity are likely to be highly controversial, in the sense that "'a substantial dispute exists as to the size, nature or effect of the . . . [F]ederal action.'" *Mary Lee Dereske*, 162 IBLA 303, 322 (2004) (quoting *Rucker v. Willis*, 484 F.2d 158, 162 (4th Cir. 1973)). Finally, while the likely impacts of any proposed action are always uncertain to some extent, we are not persuaded that such uncertainty in the present case is high, or that the proposed action poses particularly unique or unknown risks. Rather, BLM was reasonably certain regarding the likely effects of the proposed action, and that they would not rise to the level of significance.

Further, once an APD and SPO are submitted, BLM will assess the site-specific impacts of the proposed activity, and determine whether such impacts rise to the level of significance, or whether, after incorporation of appropriate mitigation measures, any significant impacts can be reduced to insignificance. BLM's conclusions will once again be subject to appeal.

We, therefore, conclude that, since Duna Vista has failed to carry its burden to demonstrate that, in deciding whether to lease the 80.28 acres of Federal oil and gas resources at issue, BLM violated NEPA by either not adequately considering likely environmental impacts or preparing an EIS, the Associate State Director's September 2013 DR is properly affirmed.

Accordingly, pursuant to the authority delegated to the Board of Land Appeals by the Secretary of the Interior, 43 C.F.R. § 4.1, the decision appealed from is affirmed.

/s/
Christina S. Kalavritinos
Administrative Judge

I concur:

/s/
James K. Jackson
Administrative Judge